Application No. 09/874,878
Examiner: Y. Lee
Attorney Docket No. 2001-0161C

AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1. (original) A method of decoding a bitstream encoded via a plurality of encoders, the bitstream

arranged in portions, the method comprising:

      identifying the portions within the bitstream; and

      routing the identified portions to one of a plurality of decoders based on a portion model

associated with each identified portion.

2. (original) The method of claim 1, wherein each portion model is assigned from a plurality of

predetermined models.

3. (original) The method of claim 2, wherein if a content of a portion does not match a

predetermined model, then the portion is assigned a generic model.

4. (original) The method of claim 3, wherein each decoder of the plurality of decoders is

optimized for one of the predetermined models.

5. (original) The method of claim 4, wherein the plurality of decoders further comprises a

generic decoder.

6. (original) The method of claim 5, wherein routing the identified portions to one of a plurality

of decoders based on a portion model associated with each identified portion further comprises

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routing the identified portions to the generic decoder if the identified portions have the generic model.

7. (currently amended) A method of decoding a bitstream divided into portions, each portion being encoded by an encoder of a plurality of encoders, the encoder being chosen based on a profile of each ~~segment~~ portion, the method comprising:

receiving the bitstream at an input switch;

routing each bitstream portion from the input switch to a decoder of a plurality of decoders based on ~~the~~ a portion model;

decoding each bitstream portion based on which encoder encoded that portion of the bitstream; and

outputting each decoded bitstream portion.

8. (currently amended) The method of decoding a bistream divided into ~~segment~~ portions of claim 7, further comprising:

receiving an output from each of the plurality of decoders at an output switch; and

outputting a decoded bitstream from the output switch.

9. (original) The method of claim 8, wherein the portion model is chosen from the group of models consisting of action, slow, opposing glances, scene detail, establishing shot, camera handling, animation mixture, and light changes.

10. (original) The method of claim 9, wherein the portion model further comprises information associated with a source format, scene concepts, properties of the scene, camera operations and special effects.

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11. (original) A method of decoding a bitstream divided into segments, each segment being

encoded by one encoder of a plurality of encoders, the one encoder being chosen based on a

profile of each segment and the plurality of encoders including a generic encoder, the method

comprising:

    receiving the bitstream at an input switch;

    routing each bitstream segment from the input switch to one decoder of a plurality of

decoders based on the segment profile, each decoder of the plurality of decoders being

associated with one of a plurality of profiles and the plurality of decoders including a generic

decoder;

    routing the bitstream segment to the generic decoder if the bitstream segment does not

have a profile; and

    decoding each bitstream segment using one decoder of the plurality of decoders, wherein

each segment having a profile is decoded via a decoder associated with that profile, and wherein

a segment not having an associated profile is decoded using the generic decoder.

12. (original) A method of encoding and decoding video content, the method using a plurality of

encoders each associated with one of a plurality of content models and including a generic

encoder associated with a generic content model, the method further uses a plurality of decoders

each associated with one of the plurality of content models and including a generic decoder

associated with the generic content model, the method comprising:

    extracting a portion from the video content;

    mapping the portion to associate a model from the plurality of models;

        if a model is mapped to the portion:

            encoding the portion using an encoder associated with the portion model;

        if a model is not mapped to the model:

            encoding the portion using the generic encoder;

    transmitting the portion to a switch;

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if a model is mapped to the portion:

routing the portion via the switch to a decoder associated with the

portion model; and

if a model is not mapped to the portion:

routing the portion via the switch to the generic decoder.

13. (currently amended) The method of encoding and decoding video content of claim 12,

further comprising:

connecting an output from each decoder of the plurality of decoders to a second switch;

and

receiving output from each decoder of the plurality of decoders to assemble ~~the~~ a

decoded ~~segments~~ segment for display.

14. (original) A method of decoding a bitstream, the bitstream divided into a plurality of portions

including description portions and video content portions, each video content portion having an

associated model which is either a generic model or a predetermined model from a plurality of

models related to the video content, the method comprising:

determining whether each portion is a description portion or a video content portion;

if a portion is determined to be a description portion:

decoding the description portion using a first decoder; and

if a portion is determined to be a video content portion:

determining whether the associated model of the video content portion is the

generic model or one of the predetermined models from the plurality of models; and

if the associated model is a generic model:

decoding the portion using a generic decoder; and

if the associated model is one of the predetermined models:

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decoding the portion using a decoder chosen from a plurality of decoders, each decoder of the plurality of decoders being associated with one of the predetermined models from the plurality of models.

15. (currently amended) The method of decoding a bitstream of claim 14, further comprising:

using decoded descriptions from the description portions to determine whether the associated model of the video content portion is ~~the~~ a general model or one of the predetermined models from the plurality of models.

16. (original) The method of claim 15, wherein a portion of the bitstream is a segment.

17. (original) The method of claim 15, wherein a portion of the bitstream is a subsegment.

18. (original) The method of claim 15, wherein a portion of the bitstream is a region of interest.

19. (original) A method of decoding a bitstream, the bitstream being divided into a plurality of video content segments, each video content segment having an associated model which is either a generic model or a predetermined model from a plurality of models related to the video content, the method comprising:

determining whether the associated model of each video content segment is the generic model or one of the predetermined models from the plurality of models; and

if the associated model is a generic model:

decoding the segment using a generic decoder; and

if the associated model is one of the predetermined models:

decoding the segment using a decoder chosen from a plurality of decoders, each decoder of the plurality of decoders being associated with one of the predetermined models from the plurality of models.

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20. (original) The method of decoding a bitstream of claim 19, wherein the predetermined models relate to concepts of a segment, properties of a segment, camera operation in a segment or special effects in a segment.

21. (original) A decoded bitstream, decoded according to the method of claim 1.

22. (original) A decoded bitstream, decoded according to the method of claim 7.

23. (original) A decoded bitstream, decoded according to the method of claim 11.

24. (original) A decoded bitstream, decoded according to the method of claim 12.

25. (original) A decoded bitstream, decoded according to the method of claim 14.

26. (original) A decoded bitstream, decoded according to the method of claim 19.

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